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ABSTRACT

This study attempts to determine whether families with a son rated by his teacher as either "high" or "low" on classroom adjustment (behavior indicative of social maturity and achievement motivation) could be differentiated on the basis of their communicative patterns. It was questioned if significant differences existed in the amount of positive or negative interaction displayed between or within such family groups. Families were assigned to the High Classroom Adjustment (HCA) group and Low Classroom Adjustment (LCA) group on the basis of teacher evaluations of self-sufficiency, self-control, achievement motivation, and behavior observations in the school. Interaction sessions were scheduled for each family, with comparisons made between the 2 groups revealing that HCA families displayed more positive and less negative interaction than LCA families. Comparisons between individual family members in the 2 groups were completed also. Results indicate that basic differences do exist between these 2 family groups in their interaction patterns. Dysfunctional communication was characteristic of all members of LCA families. Also, HCA and LCA sons were differentially involved in the family with low-adjustment sons relying on disruptive methods for recognition in the course of family interaction. (MA)

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DIFFERENCES IN INTERACTION PATTERNS OF FAMILIES WITH FIRST OR  
SECOND GRADE SONS RATED HIGH OR LOW IN CLASSROOM ADJUSTMENT

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Much recent research concerning family functioning has focused on measurement of interaction patterns (Straus; 1969; Winter and Ferreira, 1969). Within this framework, there has also been some attempt to recast the concept of family pathology in terms of a disturbance in the processes of communication. In terms of individual development within the family, this ultimately leads to consideration of the family as a unique social and psychological unit. It is a view that requires relatively new levels of analysis and empirical constructs in research.

Many authors, notably Riskin (1964), Haley (1962) and Jackson (1965), have described the family as a rule-governed, on-going system in which enduring patterns of interaction are developed over time as a means of regulating the equilibrium of the family. Research (Leighton, Stollak & Ferguson, 1971; Fisher, Boyd, Walker & Sheer, 1959; Farina & Dunham, 1963; Ferreira and Winter, 1963) has shown that normal and clinic-referred families, interact differently in essentially similar situations. Delineation of precise variables in family interaction, particularly the possible differences in these interaction patterns between normal and clinic-referred families, would seem to hold important potential for increased understanding of personality development as well as for more effective diagnostic and therapeutic measures.

The shift to family interaction as the level of analysis in research represents a serious attempt to respond more accurately to the need for a closer adaptation of the researcher's methods to his theory and purpose. Implicit in this statement is the notion of the family setting as involving sequences in which there is mutual stimulation and reinforcement between all participants - both parents and children. Theories of family interaction and the questions investigated by direct measures of family functioning have resulted in new developments in experimental procedure.

(see Straus, 1969; Winter and Ferreira, 1969) The theoretical focus has been primarily on styles of communication and specific aspects of role-taking. With family interaction as the level of analysis it seems possible to delineate behavioral measures of the important concept of communication patterns.

### Goals

The present research is not a study of normal and/or clinic-referred families as such, but rather a study of interaction patterns of families with a child rated by his teacher as either high or low on behaviors indicative of social maturity and achievement motivation. Families with children rated low on these attributes had never asked for and were never referred for psychological help. In the case of families with children rated high on social maturity and achievement motivation, they were not only normal but positively deviated in the sense of having children who were also rated as different from the "average" child.

In the most general sense, the present study questioned whether there would be significant differences in interaction patterns between such family groups. Applying the methodology of previous research, this study explored the following questions:

Question I: Is there a difference between families of children rated "high" and families of children rated "low" on classroom adjustment in the amount of positive or negative interaction displayed?

Question II: Is there a difference between individual family members in the amount of positive or negative interaction displayed comparing families of children rated "high" and families of children rated "low" on classroom adjustment?

Question III: Is there a difference in the display of positive or negative interaction between individual members of families with children rated "high" on classroom adjustment; and between individual members of families with children rated "low" on classroom adjustment?

## METHOD

### Subjects

The families participating in this study consisted of father, mother, and son triads. All families were contacted through the cooperation of the Holt, Michigan School System, which serves a middle-size, generally lower middle-class community. First and second grade teachers from four different elementary schools were asked to rate all of their male students on five scales: self-control, physical ability, self-sufficiency, achievement motivation, and sociability. (see Appendix A) Teachers were asked to place each of their boys along a four point continuum for each scale; low, medium-low, medium-high, high.

Three of the five rating scales were considered essential for evaluating classroom adjustment: self-sufficiency, self-control, and achievement motivation. A student rated in the highest category on two of these scales and above the mid-point on the third was considered high in classroom adjustment (HCA). A boy rated in the lowest category on at least two of the three scales and below the mid-point on the third was considered low in classroom adjustment (LCA).

Parents of these boys were then contacted and asked if they would be willing to participate in a study concerned with family communication. Assignment to the LCA group was made for families whose sons were first or second grade level in school and demonstrated the described pattern of low social maturity and achievement motivation. The LCA group consisted of 12 families who agreed to participate in the study.

Assignment to the HCA group was made for families whose sons were first or second grade level in school and demonstrated a high degree of social maturity and achievement motivation. The HCA group consisted of four family triads who agreed to participate. All families were unaware of the criterion they satisfied in being assigned to either the HCA or LCA groups and were told that the study was concerned with family interaction. Every family received \$5.00 for its participation.

#### Interaction Sessions

Families were individually scheduled and seated in a comfortable room arranged very much like a lounge. At the beginning of each session, the family was told that they would be videotape recorded by an experimenter in an adjacent room. The family was also instructed that information obtained from their participation was available only for purposes of data analysis.

Each member of the family was given a copy of the interaction questionnaire and a pencil. A copy of the questionnaire is presented in Appendix B. The experimenter then read the instructions as they appeared on the questionnaire:

"Though each of you has been given a copy of the form, we would like for you to decide on just one of you to fill it out. We would like each member of the family to participate in the answering of each question, since we are interested in family interaction. Please try to complete the questionnaire in 30 minutes."

The experimenter once more reminded the family that the purpose of the study was to increase our understanding of family communication and then instructed the family to begin.

### Ratings

The questionnaire task permitted the observation of the families in two major conditions: social task behavior and family discussion. Videotapes made for each family provided the basis for rating the positive and negative interaction in the setting described. The complete session for each family was analyzed by trained raters<sup>1</sup> for the following interpersonal categories: 1) affection, 2) non-specific smiling and laughing, 3) praise, 4) active interest, 5) recognition, 6) attentive observation, 7) mutual participation, 8) dependency, 9) disruptive attention seeking, 10) provokes, 11) resistance, 12) criticism, 13) exclusion, 14) evasion. (See Appendix C) The first seven categories represent positive behaviors and categories 8 through 14 represent negative behaviors. Verbal and certain non-verbal interaction was examined with this rating system with frequency counts obtained in each of the fourteen categories. Raters used a combination of time and complete statement or action by the family member being rated to define a unit. Time intervals of 5 seconds served as a basic scoring period during which behaviors for each family member were rated. For most of the categories, frequency counts represent one occurrence of the behavior. However, for categories 6 and 7, one frequency count was given if the behavior extended over at least half of the standard time interval.

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<sup>1</sup>The authors would like to thank Bruce Laycock, Larry Lerman, and Dee Johnson for serving as raters.

Each family member was rated individually with family totals for each category obtained by summing across family members. Raters were not aware of the exact nature of the study or of the experimental group to which the family being rated belonged.

Raters were trained on a sample of videotapes obtained from a pilot study with family triads using the same questionnaire and setting applied in the actual study. The inter-rater reliability was established during this training and assessed periodically as the actual study tapes were rated.



## RESULTS

Analysis of the data was initially made for the HCA and LCA families as a whole for each of the fourteen categories rated. For each behavior category scores were summed across family members to obtain family totals. The results of comparisons made in each category are presented in Table 1.

Table 1. Means and t-ratios comparing families as a whole, HCA versus LCA, for average amount of interaction in each category

Category	HCA	LCA	t	p
1. Affection*	.42	.86	-1.13	-
2. Non-specific* smiling and laughing	6.92	5.00	1.21	-
3. Praise	.58	.50	1.1	-
4. Active* interest	.33	3.00	-3.64	.001
5. Recognition*	.42	3.75	-3.57	.001
6. Attentive observation	58.00	43.41	1.83	.05
7. Mutual participation	57.91	49.44	1.11	-
Total Positive	124.58	106.30	2.15	.05

Table 1. Continued

Category	HCA	LCA	t	p
8. Dependency*	1.16	1.91	<1	-
9. Disruptive* attention seeking	1.00	2.94	-1.46	.10
10. Provokes	.00	.36	-1.71	.05
11. Resistance*	.16	2.16	-2.79	.005
12. Criticism*	.16	1.33	-3.21	.005
13. Exclusion*	.42	4.22	-3.55	.001
14. Evasion*	.58	6.02	-3.46	.001
Total Negative	3.49	18.93	-3.13	.01
Total Interaction	128.07	125.23	<1	-

\* t tests for nonhomogeneous variances

The results show that for the first seven categories, which reflect positive interaction, the HCA group displayed somewhat more non-specific smiling and laughing, praise, attentive observation and mutual participation than the LCA group. Of these four categories, only the amount of attentive observation was significantly greater for the HCA group than the LCA group. In the remaining positive categories, the HCA group as a whole displayed significantly less active interest and recognition than LCA families and somewhat less affection.

For categories 8 through 14, which reflect negative interaction, differentiation between the HCA and LCA families as a whole is always in the same direction and significant for six of the seven categories. Specifically, it was shown that HCA families displayed somewhat less dependency and disruptive attention seeking and significantly less

provocation, resistance, criticism, exclusion and evasion.

As noted in Table 1, the variances associated with comparisons in 10 of the 14 categories were not homogeneous. Positive interaction ratings were concentrated in the categories attentive observation and mutual participation. These two categories account for 93% of the mean total positive interaction for HCA families and 87% of the mean total positive interaction for LCA families. In order to obtain a better estimate of error variance for comparisons suggested by the questions advanced in the introduction and to adjust for the distribution of ratings in the positive categories, summary scores for positive and negative interaction were computed. Thus, a composite positive interaction score was computed for each family member by adding their ratings in the seven positive categories. Family totals were obtained by summing these scores across family members in each group. A composite negative score was computed for each family member by adding their ratings in the negative categories, 8 through 14, and summing across these scores to obtain a family total for negative interaction in each group. Specific comparisons suggested by the questions were made with two-tailed t-tests or planned contrasts within an analysis of variance framework.

Question I asked: Is there a difference between families of children rated "high" and families of children rated "low" on classroom adjustment in the amount of positive or negative interaction displayed? The results of comparisons between HCA and LCA families as a whole for average positive and negative interaction are presented in Table 1. As a whole, HCA families displayed significantly more positive interaction and significantly less negative interaction than the LCA families as a whole.

Question II asked: Is there a difference between family members in the amount of positive or negative interaction displayed comparing families of children rated "high" and children rated "low" on classroom adjustment? A summary of the mean ratings of the composite positive and negative behavior categories for the HCA and LCA families classified according to family role is presented in Table 2. These data were examined through two unweighted means analyses of variance, one per composite behavior score. Planned comparisons between individual HCA and LCA family members were made and those that reached significance are reported in Table 3. Results indicated that, for positive interaction, HCA sons displayed significantly more positive interaction than LCA sons, while no differences were found between HCA and LCA fathers, or between HCA and LCA mothers. The results also show that HCA fathers displayed significantly less negative interaction than LCA fathers, HCA mothers displayed significantly less negative interaction than LCA mothers and, HCA sons displayed significantly less negative interaction than LCA sons.

Question III asked: Is there a difference in the display of positive or negative interaction within a family between individual members of families with children rated "high" on classroom adjustment and between individual members of families with children rated "low" on classroom adjustment? Analysis of the data for this question required a series of comparisons of individual family members within the HCA group and of family members within the LCA group (using the Newman-Keuls procedure). The results of these comparisons reaching significance for positive and negative interaction, based on mean scores summarized in Table 2, are reported in Table 3. For the HCA group, no differences were found between fathers, mothers and, sons in the display of positive or negative

interaction. In the LCA group, no differences were found between fathers and mothers in the display of positive or negative interaction. However, LCA sons displayed significantly less positive interaction and significantly more negative interaction than their fathers and mothers.

Table 2

Summary of Mean Positive and Negative Behavior Scores  
for HCA and LCA Family Members

Family Type	Family Role			
	Father	Mother	Son	Total
Composite Positive Behavior				
HCA	125.25	125.25	123.25	124.58
LCA	117.66	119.42	81.83	106.30
Composite Negative Behavior				
HCA	2.00	.75	7.75	3.49
LCA	14.33	9.75	32.83	18.93

Table 3

Summary of Significant Results Relevant to  
Questions II and III

Composite Category	Comparison	t value <sup>a</sup>	p <
HCA versus LCA family roles			
Positive interaction	HCA vs. LCA sons	4.86	.002
Negative interaction	HCA vs. LCA fathers	-2.50	.02
Negative interaction	HCA vs. LCA mothers	-1.82	.10
Negative interaction	HCA vs. LCA sons	-5.09	.002
Family roles within HCA and LCA families			
Positive interaction	LCA fathers vs. sons	3.44	.02
Positive interaction	LCA mothers vs. sons	3.61	.05
Negative interaction	LCA sons vs. fathers	3.07	.05
Negative interaction	LCA sons vs. mothers	3.83	.05

<sup>a</sup>For comparisons of family roles within HCA and LCA families, values are Newman-Keuls. *g.*

## DISCUSSION

There are a number of possible explanations for the greater amount of affection, active interest and recognition displayed by the LCA families in this study. A common explanation for similar results with "clinic" families is their motivation to appear normal despite being identified as a family with problems. This explanation is less applicable to the LCA families in the present study because they did not consider themselves abnormal or had never explicitly been identified as such. However, the effects of being observed for psychological research in a university community must be considered relevant, particularly since this group of families is from a relatively rural, non-academic background. If difficulty in communication is a more prominent aspect of life for the LCA families, it is reasonable to expect that they would be more sensitive to the experimental situation with a tendency to overcompensate for interpersonal difficulties between family members. Consideration must also be given to the possibility that greater expression of these particular behaviors may be indicative of the real efforts these families do make in trying to establish less threatening grounds for interaction with one-another and the extent to which they must engage in explicitly supportive behavior to establish these grounds. In this context, it seems as though the HCA families have a greater capacity for focusing on the task presented to them with confidence about positive support between family members and less need to express this support explicitly.

The results of comparisons for the seven negative categories indicates the superiority of this dimension in differentiating between the two groups of families studied. The consistency of the results for

each of the negative categories is quite clear. While these findings are consistent with research with "clinic" families, specific patterns are indicated for the difficulty the LCA families had in this situation. The similarity between the LCA families in this study and "clinic" families as previously researched (e.g., Ferreira and Winter, 1963; Leighton, Stollak, and Ferguson, 1971) is the general difficulty the families have in communicating with one-another on a positive level and the high degree of negative behaviors which are manifested by family members. The LCA families in the present study demonstrate negative behaviors which indicate that difficulties frequently come into the open (provocation, disruptive attention-seeking, criticism) but are actively defended against (resistance, exclusion, evasion). Like "clinic" families in previous research, the LCA families demonstrate a cycle of frequently arising conflict, poor control over negative affect, and reversion to defensive behaviors in dealing with these disturbances. In comparison to the HCA families, the role of these negative behaviors in communication patterns for the LCA families is quite clear. It is important to note that the two groups did not differ in the total amount of interaction of a social-emotional nature. What the data from each behavior category indicate is the extent to which negative affect dominates the interpersonal involvement of LCA families compared to HCA families.

In terms of the research goals of experimentation with the family as a unit, the results of this study show that clear differentiation can be made between families of children rated "high" and families of children rated "low" on social maturity and achievement motivation. Each family triad was presented with the same situation and stimuli

for interaction. Through these experimental procedures, certain conclusions can be made about the differences between these two groups of families in their patterns of interaction. The rated verbal and non-verbal behavior, summarized along the positive and negative dimensions, was examined with respect to its bearing on two major questions: 1) The variables of family interaction associated with the functioning of families as a whole for the two groups and, 2) The variables of family interaction associated with a specific family role for the two groups.

#### Families as a Whole

The data on positive and negative interaction for families as a whole reveal the first level of differentiation between the HCA and LCA groups. It was shown that HCA families display more positive interaction in the course of communication with one another than the LCA families. It was also shown that HCA families as a whole display less negative interaction than LCA families in this situation.

The patterns displayed by the HCA families indicate their similarity to "normal" families in interaction research. "Normal" family members have been shown to be more at ease with one another and the flow of communication characterized by a greater amount of spontaneous agreement, greater individual satisfaction with a greater exchange of information compared to "clinic" families (e.g. Ferreira and Winter, 1968). In addition, HCA families appear to be capable of focusing on the task presented to them with confidence about positive support from one another. The fact that HCA family triads displayed a greater amount of positive interaction and less negative interaction than LCA family triads in this study supports the conclusion that familial communication is experienced more positively by HCA families.



The finding that LCA families as a whole displayed less positive and more negative interaction than HCA families indicates the dysfunctional characteristics of interaction at the family level for this group. In terms of the content of interaction, the LCA families display patterns similar to "clinic" families in previous research. "Clinic" families have been found to experience the interpersonal family situation more negatively and with less individual satisfaction (e.g. Ferreira & Winter, 1968). The present data also indicates the difficulty among LCA families in controlling the expression of negative affect, a finding characteristic of "clinic" families.

It seems clear that HCA families can relate to one another with greater ease and mutual involvement, minimizing the display of negative interaction in the course of familial communication. It may be that these families came into the experimental situation with basically positive expectations about one-another and their ability to function as a family unit. In the LCA families, the interpersonal family situation may be essentially threatening, which makes normative patterns difficult to adopt or unsatisfactory to the needs of individual family members. The reversion to defensive patterns tends to perpetuate rather than resolve these conflicts. The exact nature of these relationships is an area for future research to investigate before a clear understanding can be reached of where the chain of communication breakdown originates in the LCA families.

#### Family Role

Differences between individual family members in the HCA and LCA families according to family role revealed a number of patterns differentiating the two groups. The results of these comparisons for positive

interaction showed that HCA and LCA fathers as well as HCA and LCA mothers did not differ from one-another in the amount of positive interaction displayed. However, LCA sons were found to display less positive interaction than HCA sons in the family triad. Parents in the two groups were essentially similar to one-another in the display of positive interaction. It is primarily the sons in the two groups who account for overall differences in positive interaction at the family level.

The data for negative interaction are quite explicit. Differences were found between HCA and LCA family members for all three family roles. That is, LCA fathers, mothers and sons each displayed more negative interaction than their HCA counterparts. Results of these comparisons reveal the extent to which all three family members in the LCA group contribute to the patterns of negative content behavior. They indicate that individual needs are handled defensively by all members of the LCA families. Finally, the results of these comparisons support the conclusion that dysfunctional communication operates among all family members in the LCA families and is not specific to LCA sons alone, although it may be primarily "pulled" by them.

Data regarding the manner in which family role operates within the HCA and LCA families provide useful information in explaining the nature of individual involvement for the two groups. The basic question posed here is whether or not any one family member is responsible for more of the positive or negative interaction in these families. No differences were found between individual family members within the HCA group in the display of positive or negative interaction. An Equality existed such that each member contributed equally to the positive and negative content of family interaction.

In the LCA families, differences were found between family members in the expression of both positive and negative interaction. In both cases, the inequality involved a parent-child dichotomy. LCA father and mothers did not differ from one-another in the display of positive or negative interaction. It was found that LCA parents displayed more positive and less negative interaction than their sons. The communication patterns of LCA sons in the family triad can thus be characterized as contributing the least amount of positive interaction and the most amount of negative interaction compared to their parents in this situation.

An important aspect of these findings on family role in the HCA and LCA families has to do with the opportunity for interaction on a positive level, particularly for the sons. The presence and behavior of sons seems to be handled quite differently in the two groups. HCA sons share equally the possibility of being involved in family interaction in a positive way. The direction in these families seems to be one of mutual involvement for all family members on a positive level as much as possible. The presence and involvement of HCA sons in the family triad is clearly an important aspect of the equalitarian nature of functioning at the family level for this group.

In LCA families, the father and mother dominate in the display of positive interaction. The present findings indicate that LCA sons have much less of an opportunity to be involved in family interaction on a positive level. Whether this is a result of conscious efforts by LCA parents to control the child's behavior or a result of underlying attitudes about the child's role in the family is not clear. It is quite probable that LCA sons in the present study responded to minimal

involvement with their parents on a positive level by attempting to break into the communication patterns through negative behaviors. It is as if their presence can be felt only if they assert themselves in a disruptive manner. These negative self-assertions by the LCA sons may be the starting point for an increase of negative interaction among all LCA family members. Negative interaction was most often expressed by the LCA sons in these families. However, it may be that the negative behavior of LCA sons provides an indirect outlet for the negative feelings of LCA parents in this situation as well. The display of negative behaviors may be the only way in which LCA family members can express their needs to one-another, that is, in a defensive or indirect manner.

The observed data of this study have shown that differentiations can be made between even a small sample of family triads with a son rated "high" on social maturity and achievement motivation and a sample of family triads with a son rated "low" on these attributes. Differentiations were not only demonstrated for the HCA and LCA sons but also between the interaction of parents in these two groups and for the two groups of families as a whole. In this context, a major theoretical contention of family research has been supported. That is, that the maladaptive behavior manifested by a family member is intimately related to unresolved needs and dysfunctional communication patterns operating in the family as a whole. Finally, the results of this study provide support for the view that a relationship exists between behavior problems manifested in the school setting and the interactive style of the child's family. A more precise understanding of these

affective variables may be an essential factor in applying diagnostic and therapeutic techniques to families with children presenting problems in their classroom adjustment, before these difficulties reach "clinic" proportions. It may be that the beginnings of a self-fulfilling prophecy of failure with these children could most effectively be interrupted and remedied within the family context.

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## APPENDIX A

### Teacher Rating Scales

#### Instructions to teacher:

Please rate all of the boys in your class on the five scales for which definitions and rating sheets are provided. These are: self-control; physical ability; self-sufficiency; achievement motivation; and sociability. The majority of your boys should fall readily into one of the four boxes on each of the rating sheets. It is not expected that a boy will necessarily fall in the same square on all five scales. That is, a boy may be rated low on one scale, medium-high on another, etc. So that the ratings on each scale will be relatively independent of each other, please rate all your boys on self-control, then proceed to physical ability, etc. Although only the end groups are defined on each scale, the scales should be seen as more or less continuous divisions ranging from "low" through "medium low" and "medium high" to "high". The definitions of the scales are:

#### 1. Self-control

Poor self-control - This boy shows relatively little self-control. He has difficulty following rules, sitting still, and keeping his mind on his work. He may get out of his seat and move about the room, talk when he is supposed to be working, or bother others in the room. He may show angry outbursts, tantrums, or whining when he is displeased. Generally he appears to act on impulse, with little regard for the consequences of his acts.

Good self-control - This boy shows a relatively large degree of self-control, but he is not so controlled or rigid but what he can be socially outgoing with his peers and show aggressive behavior appropriate to boys. He respects rules, pays attention, concentrates on his work, and does not bother others. He shows restraint in his behavior, seems to think before acting. However, he can still be spontaneous and act or express himself when it appears appropriate to do so.

#### 2. Physical ability

Poor physical ability - This boy tends to be awkward and clumsy. He seems to lack the physical coordination you would expect of a boy his age. He may be interested in sports, but is not good at those which require physical coordination. He does not seem to have the makings of an athlete.

Good physical ability - This boy is agile, graceful and well-coordinated in his movements. He does well at games which require physical coordination; he will probably be a good athlete. He seems to enjoy physical activities and is often chosen for teams on the basis of his skill.

### 3. Self-sufficiency

In rating on this scale it should be kept in mind that some boys, because the content of the work is more difficult for them, need more help than others. Consideration of each boy's relative ability for doing school work should help on these ratings. For example, a boy of relatively low ability who asks for a moderate amount of help should be rated higher on self-sufficiency than a boy of high ability who asks for the same amount of help.

Low self-sufficiency - This boy does not generally do things on his own. He seeks an unusual amount of help from his teacher and/or peers, much more so than his abilities would suggest was necessary. Whenever things become difficult, he looks to others to tell him what to do or to do his work for him. He has difficulty starting things and carrying them through by himself. He may seek a lot of reassurance and affection from his teacher.

High self-sufficiency - This boy generally goes ahead on his own and does his work without seeking an unusual amount of help from his teacher and/or peers. He can fall back on himself when the going gets rough, and he tends to carry things through to their end. He does not seek a lot of reassurance or affection from others. But he can ask for help or information when it is appropriate to do so.

4. Achievement motivation - These ratings should take into consideration the boy's relative ability for school work. A boy of lesser ability who aspires to the same heights as a more capable boy should be rated higher on achievement motivation.

Low achievement motivation - This boy shows little motivation to do well in his school work. He does not seem to be very concerned about his performance and does not put forth his best effort. He shows little persistence, giving up easily on a job when difficulties are encountered. His poor motivation does not, however, keep him from being active in class.

High achievement motivation - This boy is highly motivated to do well in his school work. He often shows concern about his performance and tries to do his best. He is persistent, sticking to a job until it is completed, even though he encounters difficulties. He does not appear to be afraid of failing, entering actively into competitive situations.

### 5. Sociability

Low sociability - This boy is not very interested in spending time with other children. He often chooses to be by himself, and does not seem to have many friends. He may be shy and somewhat of a "loner" or just be interested in things he can do by himself.

High sociability - This boy is always doing things with other children and seems to have many friends. He will always choose to be with a group rather than by himself and always enters enthusiastically into group activities. He is socially out-going and gregarious.



## APPENDIX B

### FAMILY QUESTIONNAIRE

Though each of you has been given a copy of the form, we would like for you to decide on just one of you to fill it out. We would like each member of the family to participate in the answering of each question, since we are interested in family interaction. Please try to complete the questionnaire in 30 minutes.

1. List the names and ages of members of the family who are present.

NAME

AGE

1.

2.

3.

2. Individually, and as a family, what would you like to do if you had unlimited money and freedom?

3. As a family, decide on 2 pictures to draw and who is to draw them (use blank pages). Have everyone in the family help draw the pictures.

4. As a family, make up a story about each picture. Have everyone in the family help make up the stories.

5. Discuss the meaning of the proverb, "A rolling stone gathers no moss." Try by the end of 5 minutes of discussion to reach an agreement as to what it means. We would like each of you to have the opportunity to express his or her opinion of what the proverb means, before you reach agreement.

6. What are some of the things that members of the family disagree about? Talk in turn. Father please talk first about areas of disagreement, then mother, then son.

## APPENDIX C

### Behavior Categories for Rating Family Interaction

1. Affection: physical or facial expressions of warmth for another family member.
2. Non-Specific Smiling and Laughing: smiling or laughing, not necessarily related to ongoing activity.
3. Praise: direct verbal expressions of praise for another family member's comments or behavior (e.g. "What a lovely picture you've drawn"): explicit physical gestures of approval.
4. Active Interest: involves genuine and active interest in and respect for the feelings, wishes and opinions of others. e.g. "How do you think we should do this Johnny?"
5. Recognition: verbal or non-verbal behavior which indicates a response to or recognition that another person has said or done something toward him. Also includes giving solicited information and help.
6. Attentive Observation: focus of attention (non-verbal) is directed to another's comments or activity. Is with the other both physically and psychologically.
7. Mutual Participation: takes part in an ongoing task or interaction with one or more other family members. May do this through non-verbal behavior, through offering information (without directive intent) or seeking information which keeps the activity going.
8. Dependency: seeks evaluation, reassurance, help from another before initiating or proceeding with verbal or non-verbal activity. Expresses the need for another's involvement or approval before being able to complete a task or comment.
9. Disruptive Attention Seeking: Verbal or non-verbal behavior which interrupts an ongoing activity or diverts the focus of attention away from the ongoing activity to self.
10. Provokes: Indirect expression of hostility by trying to stir or confuse another as to whether one's intent is friendly or hostile (directly or indirectly implies that a response is sought).
11. Resistance: recognize another's attempt at interaction but actively opposes other's statements or behavior.
12. Criticism: explicitly berates or discredits another.
13. Exclusion: active disregarding of another family member's attempts at interaction in any form.
14. Evasion: avoids interactions with others by physical isolation, passive participation, or by being noncommittal.